

IN THE CLAIMS



Please amend the claims as follows:

1.-8. (Canceled)

9. (Currently Amended) A processing apparatus for forming a film, comprising:

a chamber;

a gas supply section provided to said chamber for supplying a predetermined gas into said chamber; and

an exhaust opening provided to said chamber so as to face said gas supply section and connected to exhaust means for exhausting an interior of said chamber,

~~wherein said chamber is structured such that a cross section of a flow passage of said gas, said flow passage going from said gas supply section to said exhaust opening, gradually decreases from said gas supply section to said exhaust opening~~

wherein said chamber has a gas flow passage extending from said gas supply opening to said exhaust opening, and wherein said gas flow passage has a transverse cross-sectional area with at least a width that decreases in inverse proportion to a distance from said gas supply opening along said gas flow passage.

10. (Currently Amended) [[A]] The processing apparatus according to Claim 9,
~~comprising a chamber;~~

wherein said [[a]] gas supply opening is provided to said chamber and connected to gas supply means for alternately supplying plural species of gases into said chamber; ~~and~~

~~an exhaust opening provided to said chamber so as to face said gas supply opening and connected to exhaust means for exhausting an interior of said chamber,~~

~~said chamber being structured such that a cross section of a flow passage of said~~

~~gases, said flow passage going from said gas supply opening to said exhaust opening,
gradually decreases from said gas supply opening to said exhaust opening.~~

11. (Canceled)

12. (Previously Presented) The processing apparatus according to claim 10,
wherein said chamber is structured such that a thickness of a boundary layer is
approximately constant, said boundary layer being formed when said gases are supplied into
said chamber, on a wall of said chamber that extends along a direction of flow of said gases.

13. (Previously Presented) The processing apparatus according to claim 10,
wherein said chamber is structured such that a thickness of a boundary layer is
approximately constant, said boundary layer being formed when said gases are supplied into
said chamber, on a substrate placed in said chamber approximately parallel with a direction
of flow of said gases.

14. (Currently Amended) A processing apparatus for processing a substrate, said
processing apparatus comprising:

a chamber having a bottom wall configured to support the substrate;

a gas supply opening provided to said chamber and connected to gas supply means for
alternately supplying plural species of gases into said chamber; and

an exhaust opening provided to said chamber and connected to exhaust means for
exhausting an interior of said chamber,

wherein said chamber ~~having a cross-section~~ has a cross-section that has an
approximately triangular shape as seen from a direction approximately perpendicular to said
bottom wall ~~a direction of supply of said gases, said gas supply opening being provided at~~
~~substantially an entire one side of said cross-section, and said exhaust opening being provided~~

~~at a vertex portion that faces said one side of said cross section.~~

15. (Currently Amended) A method for processing a substrate placed in a chamber by alternately supplying plural species of gases into said chamber from a gas supply opening and switching atmosphere in said chamber, said method comprising:

supplying a predetermined gas into said chamber from said gas supply opening; and
causing said predetermined gas supplied in said gas supplying to flow in said chamber in a manner that said gas ~~has a cross section of~~ flows along a gas flow passage having a transverse cross-sectional area with at least a width that decreases in ~~accordance with~~ inverse proportion to a distance from said gas supply opening.

16. (Previously Presented) The processing method according to claim 15,
wherein in said gas flow, a boundary layer having an approximately constant thickness is formed on a wall of at least one of said chamber and said substrate, along a direction of flow of said gas.

17. (Previously Presented) The processing apparatus according to claim 9,
wherein said gas supply section includes a plurality of gas supply holes arranged approximately parallel with a direction of width of said chamber.

18. (Previously Presented) The processing apparatus according to claim 17,
wherein said gas supply section includes a gas diffusion section connected to said gas supply holes.

19. (Canceled)

20. (Canceled)

21. (Previously Presented) The processing apparatus according to claim 9,
wherein a boundary layer having an approximately constant thickness is formed on a inner

wall of said chamber along a direction of flow of said gas.

22. (New) The processing apparatus according to claim 9, wherein a height of said transverse cross-sectional area remains constant along said gas flow passage.

23. (New) The processing apparatus according to claim 9, wherein a height of said transverse cross-sectional area varies along said gas flow passage such that said transverse cross-sectional area decreases in inverse proportion to the distance from said gas supply opening along said gas flow passage.

24. (New) The processing apparatus according to claim 9, wherein said chamber has a bottom surface configured to support a substrate for processing within said chamber, and wherein said chamber has a cross-section that has an approximately triangular shape as seen from a direction approximately perpendicular to said bottom wall.

25. (New) The processing apparatus according to claim 24, wherein:

said exhaust opening is provided on said chamber at a location on a vertex portion of the approximately triangular shaped cross-section of said chamber;

said gas supply opening is provided on said chamber at a location on a side of the approximately triangular shaped cross-section of said chamber that is opposite to said vertex portion; and

said gas supply opening extends along substantially an entire length of the side of the approximately triangular shaped cross-section of said chamber that is opposite to said vertex portion.

26. (New) The processing apparatus according to claim 14, wherein:

said exhaust opening is provided on said chamber at a location on a vertex portion of the approximately triangular shaped cross-section of said chamber; and

said gas supply opening is provided on said chamber at a location on a side of the approximately triangular shaped cross-section of said chamber that is opposite to said vertex portion.

27. (New) The processing apparatus according to claim 26, wherein said gas supply opening extends along substantially an entire length of the side of the approximately triangular shaped cross-section of said chamber that is opposite to said vertex portion.

28. (New) The processing method according to claim 15, wherein a height of the transverse cross-sectional area remains constant along the gas flow passage.

29. (New) The processing method according to claim 15, wherein a height of the transverse cross-sectional area varies along the gas flow passage such that the transverse cross-sectional area decreases in inverse proportion to the distance from the gas supply opening.

30. (New) The processing method according to claim 15, wherein:
the chamber has a bottom surface supporting the substrate within the chamber;
the chamber has a cross-section that has an approximately triangular shape as seen from a direction approximately perpendicular to the bottom wall;
the chamber has an exhaust opening that is provided on the chamber at a location on a vertex portion of the approximately triangular shaped cross-section of the chamber; and
the gas supply opening is provided on the chamber at a location on a side of the approximately triangular shaped cross-section of the chamber that is opposite to the vertex portion.

31. (New) The processing method according to claim 30, wherein the gas supply opening extends along substantially an entire length of the side of the approximately triangular shaped cross-section of the chamber that is opposite to the vertex portion.